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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,104	04/24/2001	Fritz Magerl	LUD-PT002-PA1083US	6204
3624	7590	11/29/2005	EXAMINER	
VOLPE AND KOENIG, P.C. UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			CHEVALIER, ALICIA ANN	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

Office Action Summary	Application No.	Applicant(s)	
	09/701,104	MAGERL ET AL.	
	Examiner	Art Unit	
	Alicia Chevalier	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-8,10,12,13,15 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-8,10,12,13,15 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RESPONSE TO AMENDMENT

1. Claims 3-8, 10, 12-13, 15 and 19 are pending in the application, claims 1, 2, 9, 11, 14 and 16-18 have been cancelled.
2. Upon further consideration the allowable subject matter noted in the office action mailed March 23, 2005 has been withdrawn.

REJECTIONS

3. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Rejections - 35 USC § 112

4. Claims 3-8, 10, 12-13, 15 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12, 15 and 19 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: polymer or ceramic material to reinforcing fibers. It is unclear from the claim language whether the polymer or ceramic material are the reinforcing fibers or if the composite comprises a polymer or ceramic material and reinforcing

fibers. It is also unclear if the reinforcing fibers are embedded in the polymer or ceramic material.

Claim 3 recites “rod material comprising carbon fibers” which is unclear. Claim 3 is dependent on claim 19 and it unclear whether the carbon fibers are additional fibers or the reinforcing fibers.

Claim 4 recites “further comprising PAEK (poly-aryl-ether ketone)” which is unclear. Claim 4 is dependent on claim 19 and it unclear whether the PAEK (poly-aryl-ether ketone) is the polymer or ceramic material.

Claim 6 recites “the fibers are enveloped by a matrix material” which is unclear. Claim 6 is dependent on claim 19 and it unclear whether the matrix material is the polymer or ceramic material.

Claim Rejections - 35 USC § 102

5. Claims 3, 5-8, 10, 12, 13, 15 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Crane (U.S. Patent No. 4,255,478).

Regarding Applicant’s claims 12, 15 and 19, Crane discloses a component (*title*) made from a composite of polymer or ceramic material (*thermosetting reins, col. 2, lines 30-31*) comprising, reinforcing fibers (*carbon and boron/tungsten fibers, col. 2, line 24 and col. 4, line 15*), wherein at least some of the reinforcing fibers are x-ray absorbing reinforcing fibers distributed throughout the composite (*figure 2*), wherein an orientation of the x-ray absorbing reinforcing fibers is tailored to a shape and application of the component in a defined manner to provide x-ray visibility control for the component (*figure 2 and col. 4, lines 15-21*), a

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concentration of the x-ray absorbing fibers is varied in different areas of the component (*figure 2*).

Regarding Applicant's claim 3, figure 1 in Crane is deemed to show the composite is prefabricated as a profile rod material, since the figure shows a rectangular shape. Crane also discloses that the composite further comprises carbon fibers (*col. 2, line 24*).

Regarding Applicant's claim 5, figure 1 in Crane shows that the fibers are continuous fibers:

Regarding Applicant's claim 6, Crane discloses that the fibers are enveloped by a matrix material (*col. 2, lines 62-66*).

Regarding Applicant's claims 7 and 8, Crane discloses that the fibers comprise nonmagnetic material, such as, tungsten (*col. 4, lines 15-16*).

Regarding Applicant's claim 10, the fibers in Crane are deemed to be oriented differently depending on the longitudinally or transverse oriented alignment of the component.

Regarding Applicant's claim 13, Crane's component is deemed to be a connecting element.

The limitation "the stiffness of the connecting element *can be* varied by varying the orientation of fibers from a force application point toward a free end of the component " is a functional limitation and is deemed to be a latent property of the prior art since the prior art is substantially identical in composition and/or structure. MPEP 2145 (II).

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Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alicia Chevalier
Primary Examiner
11/28/05

**Alicia Chevalier
Primary Examiner**